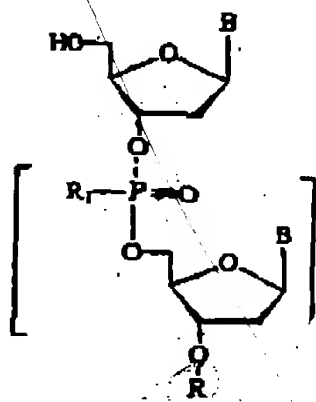
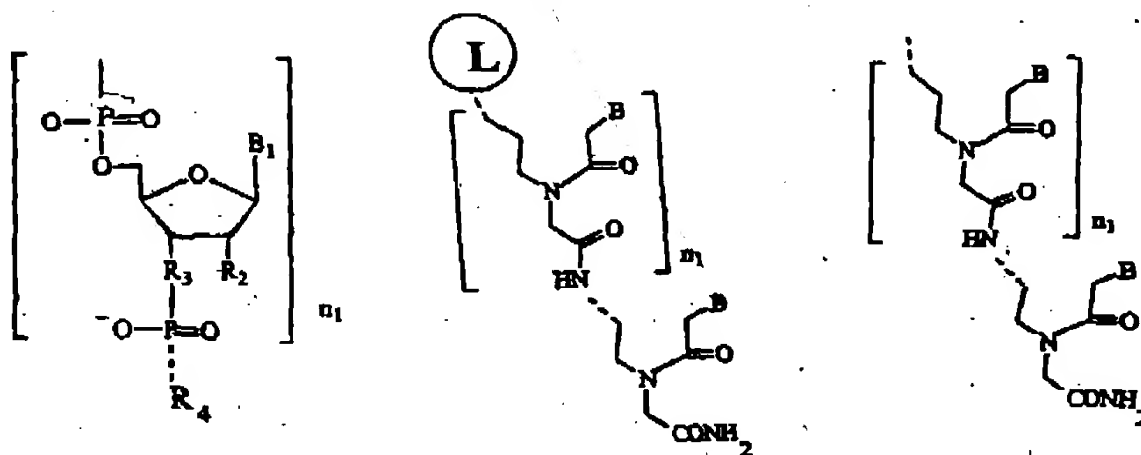


1. Chimeric oligonucleotides of a general formula I for binding telomerase, comprising,



wherein R is selected from the group consisting of



wherein

$n$  is at least 10 and not more than 20,

$R_1$  is selected from the group consisting of  $S^-$ ,  $CH_3$ , and  $O^-$ ,

B is selected from the group consisting of thymine, cytosine, adenine, and guanine,

$n_1$  is at least 3 and not more than 17,

$B_1$  is selected from the group consisting of thymine, cytosine, adenine, guanine, 5-propyluracil, and 5-propylcytosine,

$R_2$  is selected from the group consisting of H, F,  $NH_2$ , O-alkyl ( $C_1 - C_5$ ), O-allyl, and O-methoxyethoxy,

$R_3$  is selected from the group consisting of NH and O, wherein if  $R_3$  is NH,  $R_2$  must not be selected from the group consisting of  $NH_2$ , O-alkyl ( $C_1 - C_5$ ), O-allyl, and O-methoxyethoxy,

$R_4$  is selected from the group consisting of 2',3'-dideoxy-3'-fluoroguanosine, 2',3'-dideoxy-3'-azidoguanosine, 2',3'-dideoxy-3'-aminoguanosine, 2',3'-epoxyguanosine, acyclovir, gancyclovir, 2'-deoxyadenosine, 2'-deoxyguanosine, 2'-deoxycytidine, and 2'-deoxythymidine,

L is selected from the group consisting of  $-(PO_2)-OCH_2-COH-CH_2-NH-$  and  $-(PO_2)-OCH_2-CH(CH_2COOH)-(CH_2)_4NH_2$ ,

and wherein each chimeric oligonucleotide comprises an antisense sequence 3'-CAAUCCCAAUC-5', or portion thereof.